



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

trical current. One electrode was fixed to the skin by a broad moistened contact, while the other electrode, used in exploring the surface, ended in a fine metal point. By graduating the strength of the current, sensory irritation was confined to the region of the pointed electrode. It was found that electrical stimulation of different areas of the skin produced different sensations. At one spot the irritation excited only pain, at another a sense of cold, at a third of warmth, at a fourth, it might be, of pressure. Hence, it may be concluded, that the quality of the sensation depends not on the nature of the stimulus but upon the specific energy of the irritated nervous apparatus.

The author thinks he has shown that sensations of cold and warmth, respectively, are excited through different sets of nerves. The *cold* nerves are broadly scattered over the skin and their endings are rather deeply buried in its substance. The *warm* nerves are distributed to well-defined small areas from which alone we attain sensations of heat. A cold piece of metal, a square centimeter in section, laid upon a certain part of the forearm, produces no sensation of cold, while a pointed instrument of the same metal, at the same temperature, with a contact surface of only half a square millimeter, gives intensely cold sensations when applied to certain parts of the skin in the immediate neighborhood of the insensitive area.—*Zeitsch. f. Biologie*, Bd. xx, p. 141.

PSYCHOLOGY.

INTELLIGENCE OF A SETTER DOG (*Continued*).—It is perhaps proper for me to here refer to the peculiar fancy of the bitch Frank. Barney was always her choice and strange as it may seem—with him there was no reciprocation.

I have tested her pretty thoroughly, and I can say that she has not thus far permitted a dog not her own color to line her. And as a further proof a short time ago, being a few days before her season of heat, she left the farm seven miles distant upon which I had her kept and returned here.

There are numbers of dogs in the neighborhood where she was kept, but she returned and when a dog of different color from her own was offered she would fight desperately. Although kept on the farm for several months this was the only time she had left it.

Experimenting as I have with a number of dogs and bitches, I have noticed that some are very choice in their selection of a mate, while others are not. Some bitches will permit several to line them, even without interval, while others will not have but one serve them. Barney would not serve a wolf, *Canis latræs*, but Wad did. As a further evidence for comparison, showing the difference between the likes and dislikes of dogs, I give the following: Frank, as above stated, chooses a mate only of her own color, while Barney's greatest aim is to frolic with and if possible to line a pointer bitch in color nearly white, with a few black spots.

A dog more mischievous or one more noted for his original pranks, I never owned. Many of the little things usually taught a dog were not to his liking, and for this reason would at times bring harsh words upon him, but for originality I have not known his equal.

He had been taught to carry quite heavy loads of shells for me into the field to use in hunting, and in this manner he was much strengthened in his jaws. It was an easy task for him to pick up a twenty-five pound sack of shot and carry it a hundred or more feet. One time he surprised me in this feat, for I had used a sack of shot to tie him to in the office. Frank was also tied to another sack near by. I picked up the sack of shot she was fastened to and led her to another part of the office, to another room. After a few moments Barney came in carrying his sack of shot. I had not intended moving him but this ingenuity was too much in the dog's favor, he was permitted to remain.

While hunting it was a common practice for him to stand in front of me when shooting from a point, stand or blind, and while I could watch all birds that came towards me, he would give me signal by the expression of his eyes and movement of his head from which way I could expect the best shot, and many times I have waited until from his signs it was evident the birds were in close range, then turning around rapidly make a good shot.

In hunting small birds he was exceptionally fine, for when out with me collecting specimens, as I would crawl along closely watching the habits perhaps of some minute bird, he too would walk as stealthily as a cat and many times he has by his cautious actions, a look up into the tree or a wag of his tail, called my attention to one or more birds I had not as yet noticed in the tree under which we were observing.

Before going to Labrador he was a fine retriever—retrieving even a kinglet or the smallest warbler in the most careful manner, but his battles with the many wounded puffins (*F. arctica*), he retrieved while in Labrador, changed him so that it was unsafe to permit him to retrieve a small bird thereafter.

His facial expression was excellent and at no time more interesting than when astonished. At about six months of age I began working him to retrieve small birds in the field, this he did quite nicely upon ground where it was easy for him to find them, but one time the bird fell into one of the deep ravines so common along our western water-courses. Nothing daunted he jumped over the bank and was soon sliding or rolling or running down the side to the bottom; he found the bird and started for the top and was nearing the edge of the level ground when the earth slid out from under him. I was near enough to witness the whole and saw him open his mouth and swallow the bird, and then at once upon getting over his fright, in the greatest astonishment, look around, then at me as much as to enquire where was the bird?

He had no appreciation of the fact that that very small bird could have been swallowed, but as I saw him do it, there was no doubt on my part. For some minutes he labored to find that bird, even going to the bottom of the ravine, and I to change his thought shot another bird which fell into the ravine and was retrieved by him.

Another time when his facial expression was very fine, was at a time when he caught a wounded duck that had fallen near me, and while he had her in his mouth I shot another duck, and this second one also falling very near me and the dog Barney opened his mouth and the bird he had in it flew away. Without taking his eyes off the fleeing duck he watched until she had lighted upon some high land away from the water. The next day I put him to work upon the high land to find the duck, and never did I see him more pleased than when he brought the duck yet alive to me.

To give a statement of all the various strange proceedings of this dog would take too much space, for they are many, but to close I will give what perhaps was his last attempt to outwit me and to gratify his own high intelligence.

While collecting birds and animals in Dakota in the fall of 1883, near the close of the season I shot a muskrat in one of the lakes. Barney went out to where it was, in shallow water upon a sand bar, rolled it over with his foot and came towards me without it. Speaking harshly to him he returned picked up the rat and brought it to me on shore. Going towards camp I signaled him to bring the rat with him; after a few moment she complied, and as he trotted along by my side for some distance in apparently high glee I thought no more about him until I got to camp, then looking around for him I could not find him. After a little while he returned to camp and coming up to me licked my hand. Signaling to him to "bring" he instantly went away and laid down under a wagon. Believing then that he had dropped the rat I took a whip and until I gave him a very severe whipping he would not heed my demand. After he had received sufficient to conquer him he trotted off in the direction we came, and as I watched him saw him go to a bunch of undergrowth a couple of rods from the path I had come in on and there began digging where he had buried it. In a few moments he came trotting to me with the rat in his mouth. I then went to camp and he followed, carrying the rat.

The next morning at the door of my tent I accidentally shot this my best of companions, the dog who had been my assistant and watcher over many thousands of miles, by one of those most dangerous, yet very handy guns, the hammerless.—*D. H. Talbot.*

AN AFFECTIONATE ANGORA CAT.—A. Espagne gives to the *Revue Scientifique* a story of a half-breed Angora cat of exceeding docility and affection. During about fifteen days of every

year this cat left the house, ignored the calls of its owners, and led a wild life around the neighborhood. At the end of this time it returned, and was demonstratively affectionate. It was particularly attached to the aged head of the household, was always at his side or on his knee during the day, and at night slept at his feet. When he died, the cat mewed in a sad monotone never before heard from her. Four years afterwards a baby, to which the cat had transferred her affection, was taken sick and died. During its illness the cat remained most of the time below the cradle, ate little, and lost the brilliancy of its eyes. On the return of the family from the country the cat lay dying in its accustomed place, and was found dead in the morning. Though age and the cold wave which took the infant's life may have had their share in the matter, it yet seems that sorrow was the immediate cause.

C. Jamelin gives a story of a charitable Angora cat of magnificent presence, but not usually very intelligent. This cat many times brought home a hungry cat as if to obtain food for it, and finally maintained a regular pensioner. The first time the estray was brought, the Angora mewed and jumped around till food was given to it, watched it while eating, and then accompanied it to the door, hastening its departure with a series of light quick pats. The strange cat learned the lesson, and often came again as a visitor but not to stay.

INTELLIGENCE OF TORTOISES.—Anecdotes in the *Revue Scientifique* appear to show that these creatures must be credited with a considerable amount of intelligence. M. Boucard writes of one which lives in his garden, and, when called aloud by its name, Laideron, would immediately run towards the voice with all the speed a tortoise can muster.

The *Testudo mauritanica* of M. Boisse showed even more intelligence, learned to come when called by a hissing sound, followed its master like a little dog; relished caresses bestowed on its head and neck, gave gentle bites to show its affection, and would climb upon its master's boots or pull at his clothes to draw his attention.

ANTHROPOLOGY.¹

EASTERN SUDAN.—Professor A. H. Keane favors us with a most valuable piece of ethnological work on the tribes of Eastern Sudan, at a time when all eyes are turned in that direction (J. Anthropol. Inst., XIV, 91-110). Although the scheme is somewhat lengthy we present it in full, omitting the descriptive portion:

I. BANTU GROUP.

Waganda. N. W. of Victoria Nyanza, from Somerset to Alexandria Nile.

Wa-Nyoro. Between Somerset Nile and Albert Nyanza.

Wa-Soga. East from the Somerset Nile.

¹ Edited by Prof. OTIS T. MASON, National Museum, Washington, D. C.